OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

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OPINION 481

Emendation under the Plenary Powers to Lernaeocera of the generic name Lerneocera and designation under the same Powers of a type species in harmony with accustomed usage for the genus so named (Class Crustacea, Order

Copepoda)

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 481**

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Dr. Norman R. Stoll (Rockefeller Institute for Medical Research, New York, N.Y., U.S.A.) (12th August 1953)
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Doc. Dr. Ferdinand Prantl (Národni Museum v Praze, Prague, Czechoslovakia) (30th October 1954)

October 1954)
Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria)
(6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst MAYR (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)
Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

OPINION 481

EMENDATION UNDER THE PLENARY POWERS TO "LERNAEOCERA" OF THE GENERIC NAME "LERNEOCERA" AND DESIGNATION UNDER THE SAME POWERS OF A TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE GENUS SO NAMED (CLASS CRUSTACEA, ORDER COPEPODA)

RULING:—(1) Under the Plenary Powers:—

- (a) the emendation to *Lernaeocera* of the generic name *Lerneocera* Blainville, 1822 (Class Crustacea, Order Copepoda) is hereby approved;
- (b) all selections of type species for the genus Lernaeocera (emend. of Lerneocera) Blainville, 1822, made prior to the present Ruling are hereby set aside and the nominal species Lernaea branchialis Linnaeus, 1767, is hereby designated to be the type species of the foregoing genus.
- (2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below:—
 - (a) Lernaea Linnaeus, 1758 (gender: feminine) (type species, by selection by Wilson (1917): Lernaea cyprinacea Linnaeus, 1758) (Name No. 1218);

- (b) Lernaeocera (emend. under the Plenary Powers in (1)(a) above of Lerneocera) Blainville, 1822 (gender: feminine) (type species by designation under the Plenary Powers in (1)(b) above: Lernaea branchialis Linnaeus, 1767) (Name No. 1219).
- (3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below:—
 - (a) cyprinacea Linnaeus, 1758, as published in the combination Lernaea cyprinacea (specific name of type species of Lernaea Linnaeus, 1758) (Name No. 1381);
 - (b) branchialis Linnaeus, 1767, as published in the combination Lernaea branchialis (specific name of type species of Lernaeocera (emend. of Lerneocera) Blainville, 1822) (Name No. 1382).
- (4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name No. 996:—
- Lerneocera Blainville, 1822 (rejected under the Plenary Powers in (1)(a) above as an Invalid Original Spelling for Lernaeocera, a spelling placed on the Official List of Generic Names in Zoology under (2)(b) above.

I. THE STATEMENT OF THE CASE

On 12th February 1953, Professor Paul L. Illg (University of Washington, Seattle, Washington, U.S.A.) addressed a preliminary communication to the Office of the Commission on the question of the possible use by the International Commission of its Plenary Powers for the purpose of designating for the genus Lernaeocera

(emendation proposed for *Lerneocera*) Blainville, 1822 (Class Crustacea, Order Copepoda) a type species in harmony with current nomenclatorial usage. This led to the submission to the International Commission on Zoological Nomenclature by Professor Illg of the following application on 9th March 1955:—

Proposed designation, under the Plenary Powers, for the generic name "Lernaeocera" (emend. of "Lerneocera") Blainville, 1822 (Class Crustacea, Order Copepoda) of a type species in harmony with current nomenclatorial usage

By PAUL L. ILLG

(Department of Zoology, University of Washington, Seattle, Washington, U.S.A.)

The object of the present application is to secure authority from the International Commission on Zoological Nomenclature for the continued use of the well-known generic name *Lernaeocera* Blainville, 1822 (emend. of *Lerneocera* by Nordmann, 1832), in the sense established by Wilson (C.B.), 1917, with the type species *Lernaea branchialis* Linnaeus, 1767.

- 2. The genus Lernaea was included by Linnaeus in Systema Naturae, 10th edition, 1758 (1:655) and comprised three species, L. cyprinacea, L. asellina, and L. salmonea, listed by him in the order here presented. In the 12th edition of 1767 Linnaeus repeated this treatment, but in addition included a new species, L. branchialis (1:1092), which was placed first in the listing. Blainville (1822, J. Physique 95) reallocated most of the many species which had accumulated by that date in Lernaea to new genera proposed by him. For a group of species, including L. branchialis L. and L. cyprinacea L., Blainville (:375) erected the genus Lerneocera [sic.]. In the original proposition of the genus, Blainville, although clearly indicating that his object was the subdivision of the Linnaean genus Lernaea, spelled the name under consideration as Lerneocera. Nordmann (1832, Mikrogr. Beitr. Naturg. wirbel. Thiere, pt. 2:54) used the emendation conforming to Linnaeus's spelling, and this has been practically universally employed since.
- 3. Krøyer (1835, Naturh. Tidsskr. 1:191) partially reversing Blainville's treatment, synonymized with Lernaea part of the genus Lernaeocera of Blainville. He assigned L. branchialis L., L. cyclopterina Fabricius and L. surrirensis [sic] Blainville to Lernaea and (:192)

placed L. cyprinacea L. and L. esocina Burmeister in Lernaeocera. This scheme, with the additional weight of the precedence of L. branchialis in the list of species of Lernaea in the 12th edition of the Systema Naturae, was adopted as general usage by succeeding 19th century authors and the majority of references to Lernaea branchialis L. are under the Linnaean generic name.

- 4. Cunnington (1914, *Proc. zool. Soc. Lond.* 1914: 820) was the first author to designate a type species for the genus *Lernaeocera* Blainville. He was aware of the ambiguities existing in the historical usage and of the proprieties involved with reference to the International Rules of Zoological Nomenclature. In order to secure the continued association of the genus *Lernaeocera* with the series of freshwater parasitic copepods long known under that generic name, Cunnington designated *L. cyprinacea* L. as the type species of the genus.
- 5. Lernaeocera in its current usage for distinctive marine parasites was "restored" by C. B. Wilson (1917, Proc. U.S. nat. Mus. 53) by his designation (: 37) for the type species of Lernaea Linnaeus of L. cyprinacea L., 1758, and (: 84) for the type of Lernaeocera Blainville of L. branchialis Linnaeus, 1767. No author prior to Wilson had expressly selected a type species for Lernaea Linnaeus, so the result of Wilson's action is to establish Lernaeocera as an objective synonym of Lernaea, and the genus of which L. branchialis is the type species is without an available generic name. It is hereby therefore proposed to resort to the Plenary Powers of the Commission for validation of the name Lernaeocera.
- 6. The abandonment of the generic name Lernaeocera (as would be entirely proper and regular under application of the normal provisions of the Rules of Nomenclature) would be a most unfortunate compounding of a state of confusion and vexation already existing with regard to this animal. Lernaea branchialis Linnaeus has been widely cited in textbooks and other works of general application as a classical example of a parasitic copepod exhibiting profound modifications of structure, physiological processes, and life history. extensive literature has been built up with reference to these features. Between the date of Krøyer's revision and the time of Wilson's treatment, nearly a century, usage was almost universal in referring the species to Lernaea Linnaeus, which was a thoroughly logical development of the arrangement of Linnaeus's 12th edition. The adoption of the 10th edition of the Systema Naturae as the basis of the International Rules provided the technicality which led Wilson to switching the long established usage. Workers publishing since Wilson's action have been most remarkably unanimous in their deference to this strict adherence to the Rules of Nomenclature. However, it has not yet

been pointed out in any publication available to me that the logical conclusion of the process which Wilson initiated would be the submergence of the name *Lernaeocera*.

- 7. Wilson, 1917 (:81) in his revision of the Lernaeidae, used Lernaeocera, in the sense of his new designation, as the type genus of a subfamily Lernaeocerinae. Gurney (1932, British Freshwater Copepoda, 3:336) elevated the group to full familial status.
- 8. As has been explained earlier in the present application, the spelling Lerneocera used by Blainville in 1822 when establishing the genus so named was emended to Lernaeocera by Nordmann in 1832 and that spelling has been used by almost all subsequent authors. authoritative works of Wilson, 1917, and of Gurney, 1932, indicate in their synonymies such usage. It would clearly lead to undesirable instability and interference with current nomenclatorial practice if it were necessary now to revert to the original but incorrect spelling used by Blainville. The Fourteenth International Congress of Zoology at Copenhagen in 1953 provided a means for preventing disturbances in nomenclature of this kind (1953, Copenhagen Decisions zool. Nomencl.: 45—46), but this procedure is not appropriate in a case like the present where an immediate decision is required. Without such a decision it will not be possible for the Commission to deal with the main part of the present application, namely the designation of an appropriate type species for Blainville's genus under the Plenary Powers, for, in taking a decision in this sense the Commission would be bound to place the generic name in question on the Official List and this would not be possible until a decision had been reached on the question of the spelling to be approved for that genus. I therefore ask the Commission, while using its Plenary Powers for the purpose of designating a type species for this genus, to use those Powers also for the purpose of approving the spelling Lernaeocera, for this is the only way by which that spelling can be standardized and confusion avoided.
- 9. To prevent further complication in the literature, which reversal in usage in application of these names has already brought about, the following proposal is submitted for consideration by the Commission, namely:—
 - (1) that it should use its Plenary Powers:—
 - (a) to approve the emendation to *Lernaeocera* of the generic name *Lerneocera* Blainville, 1822;
 - (b) to set aside all type selections for the foregoing genus made prior to the decision now asked for and to designate *Lernaea branchialis* Linnaeus, 1767, to be its type species;

- (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Lernaea Linnaeus, 1758 (gender : feminine) (type species, by selection by Wilson (1917) : Lernaea cyprinacea Linnaeus, 1758);
 - (b) Lernaeocera (emendation under the Plenary Powers, under (1)(a) above, of Lerneocera) Blainville, 1822 (gender: feminine) (type species, by designation under the Plenary Powers under (1)(b) above: Lernaea branchialis Linnaeus, 1767);
- (3) to place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) cyprinacea Linnaeus, 1758, as published in the combination Lernaea cyprinacea (specific name of type species of Lernaea Linnaeus, 1758);
 - (b) branchialis Linnaeus, 1767, as published in the combination Lernaea branchialis (specific name of type species, by designation, under the Plenary Powers, under (1)(b) above, of Lernaeocera (emend. of Lerneocera) Blainville, 1822).

II. THE SUBSEQUENT HISTORY OF THE CASE

- **2.** Registration of the present application: Upon the receipt of Professor Illg's preliminary communication the question of a designation of a type species in harmony with accustomed usage for the genus *Lernaeocera* (emendation proposed for *Lerneocera*) Blainville, 1822, was allotted the Registered No. Z.N.(S.) 755.
- 3. Publication of the present application: The present application was sent to the printer on 30th March 1955 and was published on 7th July in the same year in Part 8 of Volume 11 of the *Bulletin of Zoological Nomenclature* (Illg, 1955, *Bull. zool. Nomencl.* 11: 252—255).

- **4.** Issue of Public Notices: Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. 4:51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 7th July 1955 (a) in Part 8 of Volume 11 of the Bulletin of Zoological Nomenclature (the Part in which Professor Illg's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given also to four general zoological serial publications.
- 5. Support received: Support for the action proposed in this case was received from two French zoologists and one Belgian zoologist. The communications so received are reproduced in the immediately following paragraphs.
- 6. Support received from Robert Ph. Dollfus (Muséum National d'Histoire Naturelle, Paris): On 3rd November 1955, Professor Robert Ph. Dollfus (Muséum National d'Histoire Naturelle, Paris) sent the following letter to the Office of the Commission in support of the present case:—

J'approve pleinement la proposition de Paul Illg pour l'adoption définitive de Lernaeocera, espèce type : Lernaeocera branchialis (L. 1767).

7. Support received from A. Capart (Institut Royal des Sciences Naturelles de Belgique, Bruxelles): On 5th October 1955, Dr. A. Capart (Institut Royal des Sciences Naturelles de Belgique, Bruxelles) addressed the following letter of support to the Office of the Commission:—

J'estime la proposition de Mr. P. Illg parfaitement justifiée et nécessaire.

La décision de la Commission á ce sujet et suivant les conseils de Mr. Illg, sera la consécration d'un usage adopté depuis de nombreuses années par les specialists de cette question.

8. Support received from Cl. Delamare Deboutteville (Université de Paris, Biologie Marine, Laboratoire Arago, Banyuls-sur-Mer, France): On 15th November 1955, Dr. Cl. Delamare Deboutteville

(Université de Paris, Biologie Marine, Laboratoire Arago, Banyulssur-Mer, France) addressed the following letter of support to the Office of the Commission:—

Je vous serais reconnaissant de bien vouloir noter que j'approuve toutes les conclusions proposées par Paul L. Illg (Commission's Reference: Z.N.(S.) 755 (Lernaeocera)). C'est cette solution de nomenclature que je comptais utiliser personnellement dans mon "Catalogue critique des Copépodes parasites".

- 9. No objection received: No objection to the action proposed in the present case was received from any source.
- 10. Supplementary proposal for the addition of a name to the "Official Index of Rejected and Invalid Generic Names in Zoology": When in April 1956 the Voting Paper to be issued to the Members of the Commission in this case came to be prepared, it was noted that by an oversight no recommendation had been included in the application for the disposal of the generic name Lerneocera Blainville, 1822, the emendation of which to Lernaeocera under the Plenary Powers was there asked for. In order to make good this omission, Mr. Hemming, as Secretary, added a proposal in Note 5 submitted with that Voting Paper that the above spelling, if rejected (as recommended), should be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

11. Issue of Voting Paper V.P.(56)20: On 25th April 1956 a Voting Paper (V.P.(56)20) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Lernaeocera* Blainville,

1822, as set out in Points (1) to (3) in paragraph 9 on pages 254—255 of Volume 11 of the *Bulletin of Zoological Nomenclature*, [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*] subject to the addition suggested in Note 5 overleaf" [i.e. in the Note so numbered to which reference has been made in paragraph 10 above].

- 12. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 25th July 1956.
- 13. Particulars of the Voting on Voting Paper V.P.(56)20: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(56)20 was as follows:—
 - (a) Affirmative Votes had been given by the following twentythree (23) Commissioners (arranged in the order in which Votes were received):

Holthuis; Boschma; Vokes; Hering; Bodenheimer; Prantl; Esaki; do Amaral; Hankó; Dymond; Bonnet; Key; Mayr; Lemche; Riley; Cabrera; Jaczewski; Stoll; Sylvester-Bradley; Tortonese; Hemming; Kühnelt; Miller;

(b) Negative Votes, one (1):

Mertens;

(c) On Leave of Absence, one (1):

Bradley (J.C.);

(d) Voting Papers not returned:

None.

- 14. Declaration of Result of Vote: On 26th July 1956, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(56)20, signed a Certificate that the Votes cast were as set out in paragraph 13 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 15. Family-Group-Name Problems: The application dealt with in the present Opinion was originally brought to the attention of the Office of the Commission before the establishment in 1953 of the Official List of Family-Group Names in Zoology and by an oversight this question was not taken up with Professor Illg prior to the publication of his application in the Bulletin of Zoological Nomenclature. At the time of the declaration of the result of the vote on this case (paragraph 14 above), this matter was however raised by the Secretary with Professor Illg in the hope that it might be possible to secure a decision on it from the Commission in time for that decision to be included in the present Opinion. At the conclusion of this correspondence it became evident that the problems involved were unusually complex and accordingly on 20th May 1957 (the day on which Professor Illg's letter on this subject was received in the Office of the Commission) Mr. Hemming, as Secretary, decided that it would be undesirable further to postpone the preparation of an Opinion in this case and he accordingly executed a Minute directing that the familygroup-name problems associated with the generic names Lernaea Linnaeus, 1758, and Lernaeocera Blainville, 1822, should be treated as constituting a separate case to which the Registered No. Z.N.(S.) 1227 was thereupon allotted.
- 16. Preparation of the Ruling given in the present "Opinion": The decision to postpone the settlement of the family-group-name problems involved in the present case, as recorded in paragraph 15 above, cleared the way for the preparation of the Ruling to be given in the present *Opinion*. Accordingly, on the same day

as that on which the decision referred to above was taken (20th May 1957) Mr. Hemming prepared the requisite Ruling and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(56)20.

17. Original References: The following are the Original references for the names placed on Official Lists and Official Indexes by the Ruling given in the present Opinion:—

branchialis, Lernaea, Linnaeus, 1767, Syst. Nat. (ed. 12) 1(2): 1092

cyprinacea, Lernaea, Linnaeus, 1758, Syst. Nat. (ed. 10) 1:655

Lernaea Linnaeus, 1758, Syst. Nat. (ed. 10) 1:655

Lernaeocera (emend. of Lerneocera) Blainville, 1822, J. Phys. 95: 375

Lerneocera Blainville, 1822 (an Invalid Original Spelling for Lernaeocera).

18. The following is the reference for the selection of a type species for a genus specified in the Ruling given in the present *Opinion*:—

For Lernaea Linnaeus, 1758: Wilson, 1917, Proc. U.S. nat. Mus. 53: 37

19. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

20. The present *Opinion* shall be known as *Opinion* Four Hundred and Eighty-One (481) of the International Commission on Zoological Nomenclature.

DONE in London, this Twentieth day of May, Nineteen Hundred and Fifty-Seven.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING